

Schutt and Riddell both manufacture and sell football equipment including helmets. Schutt owns three helmet-related patents that it alleges Riddell has infringed: U.S. Patent Nos. 9,498,014, "Protective Helmet" (the '014 patent); 8,499,366, "Helmet with Shell Having Raised Central Channel" (the '366 patent); and 6,434,755, "Helmet" (the '755 patent).

The '014 patent issued in November 2016 and includes nineteen claims. Riddell seeks construction of three terms: (1) "outer shell" as it appears in claims 3, 4, 10, 15, and 16; (2) "plurality of slits" as it appears in claims 3, 4, 7, 9, 10, and 16; and (3) "rows of vent openings extending from the front of the outer shell to the rear of the outer shell," as it appears in claims 3 and 4.

The '366 patent issued in August 2013 and also includes nineteen claims. Riddell originally sought construction of three terms from the patent, but the parties stipulated to a construction of one of them during briefing. The remaining disputed terms are: (1) "the depression in the inner shell within the raised central channel containing shock absorbing material," as it appears in claim 14 and (2) "U-shaped clamping mechanism," as it appears in claims 16, 18, and 19.

Finally, the '755 patent issued in August 2002 and includes eleven claims. Riddell seeks construction of a single term from that patent—"offset"—which appears only in claim 11.

The Court analyzes the disputed terms in the sequence listed by the parties in their joint claim construction chart. Dkt. no. 87. Because each disputed phrase has multiple proposed constructions, the Court will not list each one here, but instead will do so at the beginning of the section of the analysis discussing each phrase. These proposed constructions are taken from the joint claim construction chart and status report that the parties filed with the Court. See dkt. no. 87.

Discussion

Claim construction begins with the words of the claim itself. *Takeda Pharm. Co. Ltd. v. Zydus Pharm. USA, Inc.*, 743 F.3d 1359, 1363 (Fed. Cir. 2014). The terms used

in the claims bear a "heavy presumption that they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art." *Tex. Dig. Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202 (Fed. Cir. 2002) (internal quotation marks omitted). A term's "ordinary meaning" is the meaning it would be ascribed by "a person of ordinary skill in the art when read in the context of the specification and prosecution history." *Starhome GmbH v. AT&T Mobility LLC*, 743 F.3d 849, 856 (Fed. Cir. 2014). The specification is thus "the single best guide to the meaning of a disputed term." *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 711 F.3d 1348, 1361 (Fed. Cir. 2013). The specification may reveal a definition given to a term by the patentee that differs from the meaning it would otherwise possess. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc).

The prosecution history also "provides evidence of how the PTO and the inventor understood the patent." *Biogen Idec, Inc. v. GlaxoSmithKline LLC*, 713 F.3d 1090, 1095 (Fed. Cir. 2013). This history, however, "often lacks the clarity of the specification and thus is less useful for claim construction purposes." *AIA Eng'g Ltd. v. Magotteaux Int'l S/A*, 657 F.3d 1264, 1272 (Fed. Cir. 2011).

There are two exceptions to the general rule that claim terms are given their ordinary meaning: "1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution." *Starhome*, 743 F.3d at 856. Disavowal may be achieved "implicit[ly], so long as it is sufficiently clear"—i.e., where an implicit disavowal is "clear, repetitive, and uniform." *Rembrandt Patent Innovations, LLC v. Apple, Inc.*,

716 F. App'x 965, 972 (Fed. Cir. 2017) (collecting published cases articulating and applying the rule).

Two forms of implicit disavowal are particularly relevant here. First, "an inventor may disavow claims lacking a particular feature when the specification describes 'the present invention' as having that feature." *Poly-America, L.P. v. API Industries, Inc.*, 839 F.3d 1131, 1136 (Fed. Cir. 2016). That is, "[w]hen a patentee describes the features of the 'present invention' as a whole, he alerts the reader that this description limits the scope of the invention." *Pacing Techs., LLC v. Garmin Int'l, Inc.*, 778 F.3d 1021, 1025 (Fed. Cir. 2015). And "[t]he public is entitled to take the patentee at his word." *Honeywell Int'l, Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1318 (Fed. Cir. 2006); see also *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1346 (Fed. Cir. 2001). Second, where a patent "distinguishes or disparages prior art based on the absence" of a feature described in the new invention, that disparagement may serve as evidence of disavowal. *Rembrandt*, 716 F. App'x at 972. But, in either case, an implied disavowal must be clear and may be undermined by other intrinsic evidence from the patent's specification. See *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1136 (Fed. Cir. 2011).

A. The '014 Patent Terms

The '014 patent includes nineteen claims, seven of which include disputed terms. Each of the disputed terms appears in both claims 3 and 4 of the '014 patent. Claim 3 is representative of the disputed language:

3. A football helmet comprising:
an *outer shell* made of injection-molded plastic and comprising
a pressable front section, the front section defined by a *plurality of slits* through the *outer shell*,

an energy absorbing layer protected by the *outer shell* and having an outer surface, the outer surface including a raised ridge; the raised ridge positioned in the slits; ear holes formed in the *outer shell*; two rows of vent openings extending from the front of the outer shell to the rear of the outer shell; wherein the *outer shell* has a locally increased thickness at the plurality of slits.

JA 204 at 9:59-10:6 (emphasis added).

1. "Outer shell"

Term	Riddell's Proposal	Schutt's Proposal
"Outer shell"	"Shell outside of a separate inner shell"	Plain and ordinary meaning

Riddell asks the Court to construe "outer shell" as indicated above. It argues that the '014 patent implicitly disavows a broader construction of the claim by uniformly describing the "present invention" as including both an outer and inner shell and by disparaging prior art single-shell helmets. Schutt requests the Court give the term its plain and ordinary meaning and ignore the alleged disavowal effected by the specification. For the reasons discussed below, the Court construes the term to require both an outer and an inner shell. *Cf. Poly-America, L.P.*, 839 F.3d at 1136; *Rembrandt*, 716 F. App'x at 972.

Schutt first argues that the plain meaning of "outer shell" is unambiguous and should control. It notes that the claims themselves make no mention of an inner shell and argues that this omission indicates that the patent only covers the collapsible outer shell assembly, *not* the double-shell design. It then invokes rules against reading every feature from a patent's specification into every claim. *See, e.g., Ventana Med. Sys., Inc. v. Biogenex Labs., Inc.*, 473 F.3d 1173, 1181-82 (Fed. Cir. 2006). But Schutt's reading is implausible. It asks the Court to read the '014 patent's disputed claims as covering

only the outer shell assembly, a feature described in the specification as "[o]ne embodiment of the present invention," JA 200 at 2:-31-34, rather than the double-shell design, which is described repeatedly as inherent to "the present invention," JA 200 at 2:3-6, 7-13, 16-19.

Indeed, Schutt's contention runs afoul of controlling Federal Circuit law on construing claims in view of the specification's descriptions of "the present invention." For instance, in *Honeywell*, the Federal Circuit reviewed a district court's decision to construe the term "fuel injection system component" to mean "a fuel filter." *Honeywell*, 452 F.3d at 1315. The district court based its narrow construction on the disputed patent's specification, which "on at least four occasions . . . refer[red] to the fuel filter as 'this invention' or 'the present invention.'" *Id.* at 1318. The Federal Circuit affirmed the district court's construction, concluding that, because of the patent's consistent description of "the present invention," "[t]he public is entitled to take the patentee at his word and the word was that the invention is a fuel filter." *Id.*

Although Schutt correctly cites a previous opinion from this Court for the proposition that the phrase "the present invention" "does not *always* impart limitations," *Riddell v. Kranos Corp.*, No. 16 C 4496, 2017 WL 2264347, at *5 (N.D. Ill. May 24, 2017) (emphasis added), it fails to address the key difference between that case and this one: the evidence of implicit disavowal here is uniform and repetitive. No fewer than five express references to a double-shell design appear in the three paragraphs that purport to describe "the present invention" in the specification's Summary of the Invention. See, e.g., JA 200 at 2:3-6, 7-13, 16-19. In fact, the specification's very first sentence describes a "protective helmet having an inner shell and an outer shell

assembly." JA 188. Although a single reference could be chalked up to incautious drafting, there are more than sixty references to an "inner shell" throughout the specification, including in *every embodiment* described.

Schutt's efforts to distinguish *Honeywell*, *Rembrandt*, and other "present invention" cases are unpersuasive. It argues that each of those cases "excluded" possible expressions of broad claim language because "the patentee had clearly and unmistakably disavowed any other construction during prosecution." Pl.'s Res. Br., dkt. no 82, at 7. Schutt says that here, by contrast, Riddell allegedly seeks to "add[] new features that did not exist in the claim language." *Id.* Schutt cites no authority that supports its assertion that *excluding possible applications* of claim language based on a patent's specification and *adding limitations* to a claim based on the very same specification are legally distinct acts. Although the wordplay is clever, when subjected to any scrutiny it reveals a distinction without a difference. Simply describing an opponent's litigation position with a new synonym—and without citation to authority for the distinction—is insufficient to distinguish controlling case law.

Finally, the adopted construction is also supported by the specification's treatment of prior art single-shell helmets. "When contact is made with the conventional helmet," the specification explains, "the rigid outer shell moves as a unit, compressing the padding between the head and the shell on the contact side of the helmet." JA200 at 1:47-50. That design creates a "jarring effect" at the point of impact. *Id.* at 2:10. The '014 patent set out to address this very problem by disclosing "an improved protective helmet which provides increased protection from impact forces sustained by the wearer." *Id.* at 1:57-59. To do so, it adopted a "unique design" that employed shock

absorbing padding between an inner "hard shell" and an "outer shell assembly." *Id.* at 2:1-6. The specification goes on to note that conventional helmets could not achieve the same desirable g-force reduction because (1) lacking a hard inner shells, they "must have padding stiff enough to prevent the helmet from coming loose" and (2) the shell of a conventional helmets move as a unit, "spreading impact over the entire surface of the head," allowing less deflection. *Id.* at 2:21-25. Read in the context described here, at least the former distinction clearly disparages conventional single-shell helmets.

In sum, the Court finds that the patent's description of "the present invention" along with its disparagement of prior art dictate that the term "outer shell" must require both an inner and outer shell.

2. "Plurality of slits"

Term	Riddell's Proposal	Schutt's Proposal
"Plurality of slits"	"Multiple discrete slits (does not include a single, continuous slit)"	Plain and ordinary meaning

Riddell next asks the court to construe "plurality of slits." Riddell's argument in support of its construction rests upon comparisons between the use of "slits" and what it argues are synonyms in the '014 patent's other claims. Schutt, on the other hand, again asserts that the language is simple and should be given its plain and ordinary meaning. The Court adopts the latter construction.

Riddell's first argument is linguistic. It asserts that "slit" and "slot channel" were used interchangeably in the patent, citing a statement made during prosecution of one of the '014 patent's parent applications. See JA 203 at 7:37-38; Def.'s Opening Claim Const. Br., dkt. no. 76, at 10 (citing U.S. Patent App. No. 13/189,289). It notes that claims 1 and 2 of the '014 patent—not in dispute here—describe an *individual* "slot

channel" that "partially surround[s]" another element of the exterior of the helmet. See JA 204 at 1:37, 50. Riddell asserts that since a single slot channel can change direction as necessary to surround another feature, a single slit must also be able to change direction without each line segment representing a separate slit. Riddell argues that, based on the claims themselves, a "plurality of slits" must therefore be (1) multiple and (2) discrete.

Schutt again argues that the language is simple—it means "more than one slit"—and that a lay person therefore would be perfectly able to apply it. The Court agrees with Schutt. The ordinary meaning of a "plurality of slits" would be readily apparent not only to a person skilled in the art of designing protective sportswear, but also to a lay juror—and thus the term does not require further construction by the Court. Riddell points to nothing in the patent that persuasively suggests a different meaning was intended. Though Riddell's arguments ultimately may be persuasive in addressing the question of infringement, some go beyond the proper scope of claim construction by addressing how the term relates to its allegedly infringing products. These arguments carry no weight at this stage.

3. "Rows of vent openings extending from the front of the outer shell to the rear of the outer shell"

Term	Riddell's Proposal	Schutt's Proposal
"Rows of vent openings extending from the front of the outer shell to the rear of the outer shell"	"The vent openings extending from the front of the outer shell to the rear of the outer shell must be substantially in line with one another"	Plain and ordinary meaning

Riddell requests that the Court adopt the construction of the term indicated above. Riddell's argument rests primarily on several dictionary definitions that suggest

a "row" is typically arranged in a "straight line." For its part, Schutt first argues that construction isn't necessary. It also suggests that Riddell's proposed construction in particular is likely to introduce unnecessary confusion. Schutt then suggests, citing its own preferred dictionary definition, that the ordinary meaning of a "row" requires only two or more things arranged in an orderly series.

The Court adopts a middle position. Based the briefing and claim construction hearing presentations, it is clear that the term requires some construction. But Riddell's proposal presents unnecessary problems. The Court therefore construes "rows of vent openings extending from the front of the outer shell to the rear of the outer shell" to mean "vent openings extending from the front of the outer shell to the rear which are generally aligned." This construction captures the plain and ordinary meaning of the term while giving due weight to each of the words the patentee chose to include.

B. The '366 Patent Terms

The '366 patent includes nineteen claims, four of which include disputed terms. The first disputed term appears only in claim 14; the other appears in dependent claims 16, 18, and 19. Claims 14 and 16 are thus representative and are reproduced here:

14. A football helmet, comprising: a shell configured to fit about a head of a wearer of the helmet, the shell comprising: an inner side and an outer side, a top portion defining a front edge, the top portion having a raised central channel at least at one of a front area and a top area of the top portion of the shell, with a plurality of vent openings on each side of the channel, the vent openings being spaced from each other on each side of the channel, from front to back, along the helmet shell; and a bottom portion adjoining the top portion, the bottom portion defining: a first side edge that is integral with a first end of the front edge; and a second side edge that is integral with a second end of the front edge, wherein the front edge, first side edge, and second side edge define a segment of a circumference of the shell, the bottom portion containing a pair of earholes on respective sides of the bottom portion, each positioned rearwardly of

the respective first and second side edges, wherein a front portion of the central channel is at the front edge,
 wherein the raised central channel defines a depression in the inner side of the shell with respect to the other portions of the inner side of the shell, *the depression in the inner side of the shell within the raised central channel containing shock absorbing material.*

. . .

16. The football helmet of claim 14, including a faceguard assembly, a *U-shaped claiming mechanism* for connecting top of the faceguard assembly to the helmet shell and a pair of side attachment for connecting sides of the faceguard assembly to the helmet shell.

JA 447 at 16:26-48, 51-55 (emphasis added).

1. "The depression in the inner shell within the raised central channel containing shock absorbing material"

Term	Riddell's Proposal	Schutt's Proposal
"The depression in the inner shell within the raised central channel containing shock absorbing material"	<p>"Shock absorbing material must be within the depression, not merely spanning it"</p> <p><i>Alternative (reply):</i> "Shock absorbing material is contained within the raised central channel's depression in the inner side of the shell"</p>	<p>"Plain and ordinary meaning"</p> <p>"alternatively, shock absorbing material [extends into or is contained within] the raised central channel's depression in the inner side of the shell."</p>

Riddell asks the Court initially to adopt the first definition noted above. It then suggests in its reply that it would be satisfied with the proposed alternative construction. Schutt requests that the term be given its plain and ordinary meaning or, alternatively, a construction that specifies that the term covers shock absorbing material that "extends into or is contained within the raised central channel's depression." By the Court's reading, Riddell's alternative proposal is almost the same as Schutt's, except that Riddell's omits the words "extends into."

The essence of Riddell's argument in support of its construction is estoppel. It notes that Schutt itself described the parties as in agreement to Riddell's construction in its briefing on the Motion to Dismiss Riddell's counterclaim earlier in this litigation. Riddell is correct to the extent that Schutt did indeed describe the parties as agreeing that "claim 14 of the '366 patent requires that the shock absorbing material must be within the depression of the raised central channel, not merely spanning across it." Pl.'s Reply Br. in Supp. of Mot. to Dismiss, dkt. no. 72, at 5. Riddell argues that Schutt should therefore be estopped from now proposing an alternative reading. Riddell also argues that Schutt is prosecution-history-estopped from claiming the plain and ordinary reading of the disputed term because it adopted the limitation in an amendment designed to overcome an obviousness finding by the Patent and Trademark Office.

Neither of Riddell's arguments is persuasive. The Court is not convinced that Schutt's description of the parties' positions in its Motion to Dismiss briefing controls here. Nor does prosecution history estoppel dictate a certain construction. That doctrine "prevents a patent owner from recapturing with the doctrine of equivalents subject matter surrendered to acquire the patent." *Honeywell Int'l, Inc. v. Hamilton Sundstrand Corp.*, 523 F.3d 1304, 1312 (Fed. Cir. 2008). It does not require construing a limitation more narrowly than its plain and ordinary meaning at this stage.

Schutt again argues that the term is the sort of easily understood phrase that requires no construction. It further argues that the clause at the end of Riddell's initial interpretation—"not merely spanning it"—is likely to cause unnecessary confusion. Schutt then alternatively proposes a construction that it argues would clarify the term by

explicitly including configurations of padding that "extend[] into or [are] contained within the raised central channel's depression."

The Court adopts neither position. The carefully curated proposals suggested by both sides—e.g., that the padding must be "contained within" the depression (Riddell) or that the padding may merely "extend into" the depression (Schutt)—carry inappropriate implications for the required extent of padding intrusion. Riddell's clever use of the word "within" appears to sneak implications of confinement and exclusive containment into the term. Meanwhile, Schutt's proposal seeks to water down the term's requirement that the depression "contain[]" padding by adding the words "extends into." Neither proposal captures the term's meaning with sufficient fidelity.

The Court thus construes the disputed term to mean that, in order to be covered by the relevant claim, "some shock absorbing material must be within the depression." This construction clarifies but remains faithful to the term as it appears in the '366 patent.

2. "U-shaped clamping mechanism"

Term	Riddell's Proposal	Schutt's Proposal
"U-shaped clamping mechanism"	Does not include loop straps	Plain and ordinary meaning

Riddell next asks the Court to construe the "U-shaped clamping mechanism" used in the '366 patent to secure the described helmet's faceguard to its outer shell. Its request is narrow, seeking only to construe the term to exclude loop straps. Schutt once more suggests that the term requires no construction. The Court agrees with Schutt.

Riddell's proposal is inappropriate at the claim construction stage. Riddell begins by explaining that its accused helmets employ loop straps to secure faceguards. It goes

on to argue the '336 patent's specification clearly suggests loops straps are excluded. It points to the specification's description of prior art using loop straps as "creat[ing] separation between the shell of the helmet and the attached faceguard," which the invention in the '366 patent apparently sought to eliminate. See JA440:1:36-41. Allegedly unlike loop straps, the clamping mechanism described in the specification "engages the top portion of the faceguard assembly so that the top portion of the faceguard assembly makes direct contact with the top portion of the shell." JA440:1:59-67. Riddell suggests that the specification should be read to criticize, and thus disavow, loop straps. It also argues that loop straps would not be covered by the plain and ordinary meaning of the term, since they neither "clamp" nor are "U-shaped"—they are allegedly shaped more like a 'b' or 'd.'

For its part, Schutt argues that the term is readily understood by a person of ordinary skill in the art. It asserts that rather than criticizing loop straps, the patent actually praises them. That is, rather than disavowing loop straps, the specification allegedly criticizes only the prior art straps' thickness and placement on the outer shell of the helmet, which create too much space between the faceguard and outer shell.

Accepting Riddell's proposed construction—to state that the term "does not include X," X being a feature contained in the accused product—would be clear legal error. Riddell's proposed construction would have the Court improperly resolve a question of infringement under the cloak of claim construction, contrary to controlling precedent. See *Cohesive Techs., Inc. v. Waters Corp.*, 543 F.3d 1351, 1367 (Fed. Cir. 2008) ("The district court erred . . . by construing the claim merely to exclude the accused device."); *Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d

1322, 1326 (Fed. Cir. 2006) ("[A] trial court should certainly not prejudge the ultimate infringement analysis by construing claims with an aim to include or exclude an accused product or process."); *SRI Int'l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1118 (Fed. Cir. 1985) (en banc) ("A claim is construed in the light of the claim language, the other claims, the prior art, the prosecution history, and the specification, *not* in light of the accused device." (emphasis in original)).

The Court therefore agrees with Schutt that the term does not require construction because it has a readily understood meaning. A person of ordinary skill in the art—indeed, a lay person familiar with the English alphabet—will readily understand what a U-shaped clamping mechanism is. The term therefore requires no further construction.

C. The '755 Patent Term

The '755 patent includes eleven claims, but the disputed terms appear only in claim 11. The language of that claim is thus informative:

11. A helmet, comprising a shell having a rear portion and opposite side portions having ear holes and an *offset* defined on a substantially continuous portion of the shell extending between the rear and opposite side portions for increasing the flexural resistance of the shell, wherein the *offset* extends substantially between the ear holes.

JA 15 at 8:29-35 (emphasis added).

Term	Riddell's Proposal	Schutt's Proposal
"Offset"	"A portion of the shell that defines a surface that lies in the plane above or below a neighboring surface of the shell."	Plain and ordinary meaning

Riddell argues that "offset" ought to be construed as noted above. In a reversal from the other disputed terms, Riddell proposes a broader construction while Schutt

again champions the plain and ordinary meaning. (As Riddell conceded at the hearing, this is a precursor to a likely argument about invalidity.)

Riddell argues that its construction is necessary to clarify that an offset may be either inward or outward from the outer shell of a helmet. Indeed, it writes that "[t]he plain meaning of 'offset' would encompass inwardly and outwardly projecting offset structures, and nothing in the patent or prosecution history redefines or narrows this broad term." Def.'s Opening Claim Const. Br., dkt. no. 76, at 22. Riddell appears to even acknowledge that its proposed construction is simply intended to be a restatement of "the plain meaning of the term." *Id.* at 24.

Schutt argues that construction of the term is unnecessary and potentially confuses the straightforward plain language. It further suggests that Riddell's proposed construction could lead to practically any minor bump or other lateral variation on the helmet being considered an "offset." Schutt's latter contention appears to be baseless given the term's context: "an offset defined on a substantially continuous portion of the shell *extending between the rear and opposite side portions* for increasing the flexural resistance of the shell, wherein the offset *extends substantially between the ear holes*." JA 15 at 8:31-35 (emphasis added). Because the offset must extend across the surface of the helmet, minor bumps are easily dismissed as outside the meaning of the term.

The parties ultimately came to substantial agreement on this term during the claim construction hearing. The term "offset" is to be given its plain and ordinary meaning, with the sole clarification that an offset can be inward or outward—i.e., toward the head of the helmet's wearer or away from it.

Conclusion

The disputed claim terms are construed in accordance with the conclusions set forth in this Memorandum Opinion and Order. The case is set for a status hearing on September 17, 2018 at 9:30 a.m. to set a schedule for further proceedings. The parties should be prepared to discuss the possibility of consolidation of the trials in this case and Case No. 16 C 4496 as well as moving up the currently-set trial date in Case No. 16 C 4496.



MATTHEW F. KENNELLY
United States District Judge

Date: September 12, 2018